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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/170,336 10/13/98 BEETESON

J UK9-98-026

EXAMINER

WM02/0307

IBM CORP.  
IP. LAW DEPT.  
TJ WATSON RESEARCH CENTER  
P O BOX 218

NIGLIVEN, K

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 03/07/01

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/170,336

Applicant(s)

BEETESON ET AL.

Examiner

Kevin M. Nguyen

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

### DETAILED ACTION

The amendment filed on 1/30/2001 is entered. The rejection of claims 1-11 are maintained.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakamura et al. (U.S. Patent No. 5,818,403).
3. As to claim 1, Nakamura et al. teaches a matrix addressed display device (col. 7, lines 10-13) which includes a cathode means (col. 7, line 30). Figure 3 shows grid electrode means lines X1, X2, ... having a plurality of electron-emitting and modulation electrodes Y1, Y2, ... are arranged to form an XY matrix corresponding to the claimed grid electrode means (col. 5, lines 25-29), with this apparatus, at a voltage of from 5 to 10 kV applied to the transparent electrode 66, cut-off control was practicable at a voltage of the modulation electrode 64 of -30 V or more negative voltage (col. 9, lines 8-11), the information signals for the scanning line of M=1, information signals to be inputted to even-numbered modulation electrodes (N=2, 4, . . . ) are stored in a memory 80, while the information signals to be inputted to odd-numbered modulation electrodes (N=1, 3, 5, . . . ) are inputted directly thereto by a voltage application means 81 as

Art Unit: 2674

modulation voltages ( $V_{m.sub.1}$ ,  $V_{m.sub.3}$ ,  $V_{m.sub.5}$ , . . . ) including ON voltages, cut-off voltages and gradation voltages in corresponding with the information signals.

During this period, a cut-off voltage ( $V_{off}$ ) is applied to the even-numbered modulation electrodes ( $N=2, 4, . . .$ ) irrespectively of the information signals according to cut-off the signals sent out from the signal switching circuit (signal separation means) 82 to a voltage application means 83 (col. 9, lines 28-41).

4. As to claim 2, Nakamura et al. teaches a voltage application means 81 (Amp) as modulation voltage ( $V_{m1}$ ,  $V_{m3}$ ,  $V_{m5}$ ,...) corresponding to the claimed means for providing gain correction information (fig.13, col. 9, lines 33-34).

As to claims 3-5 and 9-11, Nakamura et al. teaches the information signals for the scanning line of  $M=1$ , information signals to be inputted to even-numbered modulation electrodes ( $N=2, 4, . . .$ ) are stored in a memory 80 corresponding to the claimed a non-volatile memory for storing a plurality of values for a cut-off and gain correction information (col. 9, lines 28-31).

5. Claims 3 and 4-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. in view of Baldi (5,708,451).

6. As to claims 3 and 5-11, Nakamura et al. teaches all of the claimed limitations of claim 1, except for a non-volatile memory and the screen having a phosphor coating facing the grid electrode means. However, Baldi teaches a related matrix addressed display device further which include the memory for string the correction matrix is a nonvolatile (col. 6, lines 53-55). It would have been obvious to utilize the X and Y driver circuits taught by Nakamura et al. for the row and column driver circuits disclosed in the

a matrix addressed display of Baldi because the memory is quite compatible with nonvolatile memories available nowadays is either EPROM, FLASH-EPROM or EEPROM technology (col. 6, lines 59-64 of Baldi).

7. As to claim 4, Baldi teaches trim-up the luminance of the display for compensating long term decline of luminance due to the phosphors aging process (abstract) a phosphor coated screen (anode) (col. 4, line 9). It would have been obvious this would be altogether these known solutions have only slight impact on the related problem of the aging of the phosphors (col. 5, lines 22-23).

#### ***Response to Arguments***

8. Applicant's arguments filed 1/30/2001 have been fully considered but they are not persuasive. Applicant's arguments with respect to claims 1-11 are not persuasive. Applicant argues that in claim 1, Nakamura fails to teach the term "cut-off" to mean non-information signals to be applied to non-selected rows (page 4, 2<sup>nd</sup> paragraph, Amendment B). However, Baldi's invention teaches the correction signal (value) for each pixel (col. 8, line 44). These arguments are not persuasive because the correction values taught by Baldi can be loaded in parallel on the column driver of the screen, as depicted in Fig. 5 (col. 8, lines 23-25).

For these reasons, the rejections of claims 1-11 based on Nakamura et al. and Baldi have been maintained.

#### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Nguyen whose telephone number is 703-305-

Application/Control Number: 09/170,336  
Art Unit: 2674

Page 5

6209. The examiner can normally be reached on MON-FRI from 9:00-5:00 with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A Hjerpe can be reached on 703-305-4709. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-6606 for regular communications and 703-308-6606 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Kevin M. Nguyen  
Examiner  
Art Unit 2674

KN  
February 26, 2001



**RICHARD HJERPE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**